

CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

ORDER NO. 85-98

WATER RECLAMATION REQUIREMENTS FOR:

BUENA VISTA WINERY  
SONOMA, SONOMA COUNTY

The California Regional Water Quality Control Board, San Francisco Bay Region, (hereinafter called the Board) finds that:

1. The Buena Vista Winery (hereinafter called the Discharger) is located at 27000 Ramal Road, Sonoma, in Sonoma County. The Discharger, on May 2, 1985, submitted a Report of Waste Discharge supplemented by consultant's technical information proposing an increase in sewage flow as well as the usage of reclaimed wastewater for vineyards irrigation.
2. The Winery's present production level is approximately 125,000 cases of wine per year. The Discharger's existing wastewater facilities treat a combined sanitary and industrial waste flow by biological stabilization in two aerated storage lagoons with disposal by evaporation in three shallow evaporation ponds. Waste Discharge Requirements for the current discharge were adopted on April 20, 1976 in this Board's Order No. 76-33.
3. The Discharger proposes to expand its production level from 125,000 cases per year to 350,000 cases per year within the next seven years (1985-1992). At its ultimate projected production level, the Winery proposes to discharge the following:
  - (a) Waste-001 is winery processing wastewater consists of drainage from floors, exterior wash areas, and crushing pit drains. During the 60-day crushing season (approximately September and October) of each year, the average flow is anticipated to be 29,300 gallons per day (GPD) with a peak flow of as high as 55,000 GPD based on a total crush tonnage of 5,145 tons of grape over that 60-day period. During the processing season for the rest of the year, waste flow averages approximately 11,200 GPD. The total annual flow is around 5.2 million gallons.
  - (b) Waste-002 consists of up to 750 GPD of sanitary wastewater generated from 50 winery employees. A separate collection and septic tank treatment system is proposed. The sanitary wastewater is to be discharged to a subsurface leachfield located on the Discharger's property approved by the Sonoma County Health Department.
  - (c) Waste-003 consists of up to 400 cubic yards per year of agricultural solids wastes resulting from crushing and wine production that include stems, pomace, and lees. The solid wastes will be disposed of on the 625 acres of vineyard operated by the Discharger by spreading and discing into the soil.

4. Winery processing waste (Waste-001) will be collected in separate gravity sewer lines and neutralized prior to being pumped to three (3) oxidation ponds for biological stabilization. The ponds have a total surface area of 2.2 acres and will all be equipped with surface aerators. Total storage volume of the pond system will be around 4.3 million gallons which is sufficient to contain all projected winery process wastes during wet weather, plus excess seasonal precipitation up to a 10-year recurrence interval with a minimum of two feet of freeboard. Treated effluent from the pond will be disposed of by the existing three evaporation ponds (a total surface area of 1.67 acres) during dry weather or be used for drip irrigation of approximately 80 acres of vineyard partially on adjoining property that is managed and operated by the Discharger. Maximum irrigation rate is estimated to be 0.27 inches per week. Attachment A is a location map showing the treatment, evaporation, and proposed vineyard disposal area and is hereby made a part of this Order.
5. The Discharger has instituted water conservation methods as well as personnel training in an attempt to reduce unit waste flow (during crushing season) from 700 gallons per day per ton (gpd/ton) to 340 gpd/ton within the next seven years, while the production level would increase from 125,000 cases per year to 350,000 cases per year during that period. It is projected that maximum wastewater flow would occur during the 1990 crushing season with an average flow of 30,000 gallons per day. This flow figure has been used to size the storage pond and disposal area.
6. The Board adopted a revised Water Quality Control Plan for the San Francisco Bay Basin (Basin Plan) on July 21, 1982. The Basin Plan contains water quality objectives for the Sonoma Creek and San Pablo Bay.
7. The Beneficial uses contained in the Basin Plan for the lower Sonoma Creek and San Pablo Bay are:
  - a. Industrial service supply
  - b. Navigation
  - c. Water contact recreation
  - d. Non-contact water recreation
  - e. Warm fresh water habitat
  - f. Cold fresh water habitat
  - g. Wild life habitat
  - h. Preservation of rare and endangered species
  - i. Fish migration and spawning
  - j. Ocean commercial and sport fishing
  - k. Shell fish harvesting
  - l. Estuarine habitat
8. The beneficial uses of the Sonoma Valley groundwaters as set forth in the Basin Plan includes:
  - a. Municipal water supply
  - b. Agricultural water supply
  - c. Industrial process water supply and service supply

9. Section 13523 of the California Water Code provides that a Regional Board, after consulting with and receiving the recommendations of the State Department of Public Health, and if it determines such action to be necessary to protect the public health, safety, or welfare, shall prescribe water reclamation requirements for water which is used or proposed to be used as reclaimed water.
10. The wastewater reclamation requirements are in conformance with the statewide reclamation criteria established by the State Department of Health Services as prescribed in Title 22, Section 60301 through Section 60355, California Administrative Code.
11. The County of Sonoma determined on the basis of an initial study that the project, as described, will have no significant adverse effect on the environment, and therefore adopted a Negative Declaration regarding this project dated April 25, 1985 in accordance with the California Environmental Quality Act (Public Resources Code Section 21000 et. seq.).
12. The Board has notified the Discharger and interested agencies and persons of its intent to prescribe water reclamation requirements and has provided them with an opportunity for a public hearing and an opportunity to submit their written views and recommendations.
13. The Board, in a public meeting, heard and considered all comments pertaining to the water reuse.

IT IS HEREBY ORDERED, that the Buena Vista Winery, pursuant to the provisions of Division 7 of the California Water Code and regulations adopted thereunder, shall comply with the following:

A. Reclaimed Water Use Restrictions

1. No waste shall be applied to the vineyard disposal area in anticipation of or during rainfall, 48 hours after a rainfall, or when soils are saturated to a point where runoff is likely.
2. No waste shall be allowed to escape from the Discharger's property into waters of the State via surface flow, airborne spray, or surfacing after percolation.
3. Ponding shall not occur in the disposal area in amounts which could cause a mosquito problem.
4. Reclaimed water shall not be injected into any fixed irrigation system connected to a domestic water supply.
5. Use of reclaimed water on areas not specified on Attachment A of this Order is prohibited without written authorization from the Executive Officer of this Board.
6. The public shall be effectively excluded from the waste treatment, storage, or disposal areas.

B. Discharge Specifications

General:

1. Neither the treatment nor the disposal of wastes shall create a nuisance or pollution as defined in the California Water Code.
2. The disposal of the wastes shall not degrade the quality of any groundwater suitable for domestic use or cause an increase in any groundwater quality parameter that would make the groundwater unsuitable for irrigation use.
3. The discharger shall maintain in good working order and operate as efficiently as possible any facility or control system installed by the discharger to achieve compliance with these water reclamation requirements.
4. Both the aeration ponds and the disposal/evaporation ponds shall be clearly identified with posted notices or warning signs.
5. To prevent overflow or backup in the pump station wet well due to power failure or mechanical breakdown, an alarm system for high water level in the wet well must be installed.
6. Waste-001 shall not exceed an average daily flow of 30,000 gallons per day during the crushing season.
7. Waste-002 and Waste-003 shall not be discharged into the pond system. Waste-002 shall be kept below the soil surface at all time.

Aeration/Storage Ponds:

8. The ponds shall be adequately protected from erosion, washout and flooding from a rainfall event having a predicted frequency of once in 100 years.
9. To prevent threat of overflows, a minimum freeboard of two feet shall be maintained in the ponds at all time.
10. Waste at the surface of the ponds shall meet the following quality limits at all times:

In any grab sample:

Constituent	Limitation
Dissolved Oxygen	2.0 mg/l minimum
Dissolved Sulfide	0.1 mg/l maximum
pH	6.0 minimum 9.0 maximum

11. The bottom of the proposed new pond must be lined or compacted so that percolation of waste into subsurface soils has a rate of

less than  $10^{-6}$  cm/sec.

Disposal/Evaporation Ponds:

12. A minimum freeboard of one foot in the disposal ponds must be kept all the time during the disposal period. Between September 1 and October 15, water level in the ponds shall at all times be kept lower than six (6) inches in depth. No wastewater shall be present in the evaporation area after October 15 of each year and before April 15 of each year.

C. Provisions

1. The discharger shall comply with a Self-Monitoring Program as ordered by the Executive Officer.
2. By October 1 of each year, the discharger shall submit a report to the satisfaction of the Executive Officer containing the depth of freeboard in each pond, the status of the evaporation area, and an assessment of the ability of the ponds to maintain the minimum freeboard in the ponds throughout the wet season with anticipated rains and waste inflow.
3. The Board will review this Order periodically and may revise the requirements when necessary.
4. In the event the discharger is unable to comply with any of the conditions of this Order due to:

- (a) Breakdown of waste treatment equipment;
- (b) Accidents caused by human error or negligence; or
- (c) Other causes such as acts of nature,

the discharger shall notify the Executive Officer by telephone as soon as he or his agents have knowledge of the incident and confirm this notification in writing within two weeks of the telephone notification. The written notification shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to correct the problem and the dates thereof, and what steps are being taken to prevent the problem from recurring.

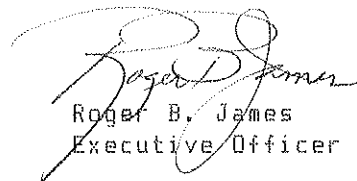
5. In the event of any change in control or ownership of land or waste discharge facilities presently owned or controlled by the discharger, the discharger shall notify the succeeding owner or operator of the existence of this Order by letter, a copy of which shall be forwarded to this Board.
6. The discharger shall permit the Board or its authorized representative in accordance with California Water Code Section 13267(c):

- (a) Entry upon premises in which an effluent source is located

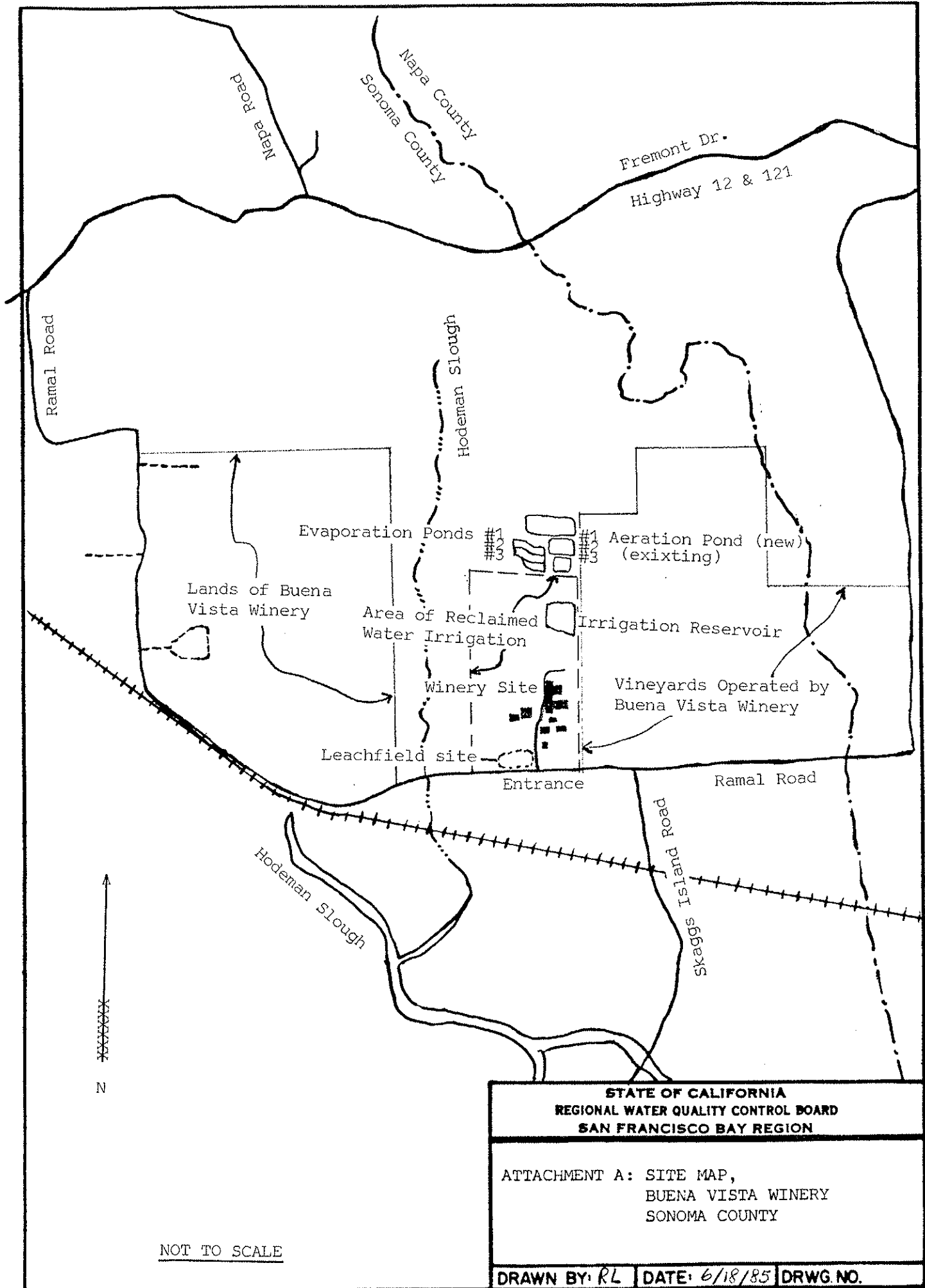
or in which any required record are kept.

- (b) Access to copy any records required to be kept under terms and conditions of this Order.
  - (c) Inspection of any monitoring equipment or method required by this Order.
  - (d) Sampling of any stored or disposed wastewater.
7. The volume of waste shall be limited to that described in findings 3 and 5 of this Order. The discharger shall file with the Board a report of waste discharge at least 120 days before making any material change or proposed change in the character, location, or volume of the discharge.
8. In reviewing the compliance with Reclaimed Water Use Restrictions A.2, and Discharge Specifications B.9 and B.12 of this Order, the Board will take special note of the difficulties encountered in achieving compliance during entire wet seasons having a rainfall recurrence interval of greater than once in ten years.
9. After notice and opportunity for a hearing, this Order may be terminated or modified for cause, including, but not limited to:
- (a) Violation of any term or condition contained in this Order;
  - (b) Obtaining this Order by misrepresentation, or failure to disclose fully all relevant facts.
  - (c) A change in any condition that requires either a temporary or permanent reduction or elimination of the authorized discharge.
10. Order No. 76-33 is no longer applicable and is hereby rescinded.

I, Roger B. James, Executive Officer, do hereby certify the foregoing is a full, true, and correct copy of an Order adopted by the California Regional Water Quality Control Board, San Francisco Bay Region on September 18, 1985.

  
Roger B. James  
Executive Officer

Attachment: Site Map  
Self-Monitoring Program



CALIFORNIA REGIONAL WATER QUALITY CONTROL BOARD  
SAN FRANCISCO BAY REGION

F I N A L  
SELF-MONITORING PROGRAM  
FOR

.....BUENA VISTA WINERY.....  
.....SONOMA.....  
.....SONOMA COUNTY.....

ORDER NO. ....85-98.....

CONSISTS OF  
PART A



## PART A

### I. GENERAL

Reporting responsibilities of waste dischargers are specified in Sections 13225(a), 13267(b), 13268, 13383, and 13387(b) of the California Water Code and this Regional Board's Resolution No. 73-16.

The principal purposes of a monitoring program by a waste discharger, also referred to as a self-monitoring program, are:

1. To document compliance with waste discharge requirements and prohibitions established by the Regional Board.
2. To facilitate self-policing by the waste discharger in the prevention and abatement of pollution arising from waste discharge.

### II. DESCRIPTION OF SAMPLING STATIONS AND SCHEDULE OF SAMPLING, ANALYSIS AND OBSERVATIONS

#### A. Pond Influent

At any point in the treatment facilities headworks at which all waste tributary to the system is present:

Monthly, determine average daily flow, in gallons per day, of wastewater entering the aeration pond system.

#### B. Aeration/Storage Pond

At any point in each pond within one foot of the water surface and no less than three feet from the bank, representative of the wastewater:

1. Monthly, a grab sample to determine dissolved oxygen (D.O.) concentration, in mg/l. If D.O. is less than 2.0 mg/l, sample for dissolved sulfide.
2. Monthly, a grab sample to determine pH.
3. Weekly, perform standard observations along the perimeter of each pond:
  - a. Evidence of leaching liquid from pond perimeter dike and estimated size of affected area. (Show affected area on a sketch)
  - b. Odor: presence or absence, characterization, source and distance of travel.
  - c. Estimated number of waterfowl and other water associated birds in the vicinity of the ponds.

- d. Determine freeboard, in inches, for each pond: from the water surface to the lowest point in pond perimeter dike.

#### C. Pond Effluent

Daily, determine flows in gallons per day of wastewater transferred from treatment ponds to the evaporation ponds and/or the vineyard drip irrigation area.

#### D. Evaporation/Disposal Pond Area

Weekly during the disposal period, perform standard observations as described in II.B.3. along the perimeter of each disposal pond.

#### E. Vineyard Drip Irrigation Area

Daily, during the irrigation period, observe the whole area for the following:

1. Evidence of surface runoff escaping from the drip irrigation area and estimated size of affected area. (Show affected area on a sketch)
2. Odor: presence or absence, intensity, and distance of travel.
3. Existence of Posted notices or warning signs to notify the public or winery employees that the water used for irrigation is reclaimed waste.

#### F. Leachfield Area

Weekly, during the raining season, determine if any surfacing of wastewater is occurring. If observed, notify the Regional Board by telephone within 48 hours.

### III. REPORT TO BE FILED WITH THE REGIONAL BOARD

#### 1. Violation of Requirements:

In the event the discharger is unable to comply with the conditions of the waste discharge requirements and prohibitions due to:

- (a) maintenance work, power failures, or breakdown of waste treatment equipment, or
- (b) accidents caused by human error or negligence, or
- (c) other causes such as acts of nature,

the discharger shall notify the Regional Board office by telephone as soon as he or his agents have knowledge of the

incident and confirm this notification in writing within two weeks of the telephone notification. The written report shall include pertinent information explaining reasons for the non-compliance and shall indicate what steps were taken to prevent the problem from recurring.

In addition, if the non-compliance caused by items (a), (b), or (c) above is with respect to any of the effluent limits, the waste discharger shall promptly accelerate his monitoring program to analyze the discharge at least once every week for those constituents which have been violated. Such weekly analyses shall continue until such time as the effluent limits have been attained, or until such time as the Executive Officer determines to be appropriate. The results of such monitoring shall be included in the regular Self-Monitoring Reports.

## 2. Bypass Reports

Bypass reporting shall be an integral part of regular monitoring program reporting and a report on bypassing of untreated waste or bypassing of any ponded water shall be made which will include cause, time and date, duration and estimated volume of waste bypassed, method used in eliminating volume, and persons (including Sonoma County Department of Environmental Health) notified, for planned and/or unplanned bypasses. Notification to the Regional Board shall be made immediately by phone, followed by written correspondence within 15 days if a bypass occurs.

The discharger shall file a written technical report at least 15 days prior to advertising for bid on any construction project which would cause or aggravate the discharge of waste in violation of requirements; said report shall describe the nature, costs, and scheduling of all action necessary to preclude such discharge.

## 3. Self-Monitoring Reports

Written reports shall be filed regularly for each calendar month and submitted by the fifteenth day of the following month. The reports shall be comprised of the following:

### a. Letter of Transmittal:

A letter transmitting self-monitoring reports should accompany each report. Such a letter shall include a discussion of requirement violations found during the past month and actions taken or planned for correcting violations, such as plant operation modifications and/or plant facilities expansion. If the discharger has previously submitted a detailed time schedule for correcting requirement violations, a reference to the correspondence transmitting such schedule will be satisfactory. The letter shall contain a statement by the official, under penalty of perjury, that to the best of the signer's knowledge the

report is true and correct.

b. Data Results

All results observed or analyzed in II.A., II.B., II.C., II.D., II.E., and II.F.

c. List of Approved Analyses

1. Listing of analyses performed by the discharger for which the discharger is approved by the State Department of Health Services.
2. List of analyses performed for the discharger by another laboratory currently or previously approved by the State Department of Health Services (and copies of reports signed by the laboratory director of that laboratory shall also be submitted as part of the report).

I, Roger B. James, Executive Officer, do hereby certify that the foregoing Self-Monitoring Program:

1. Has been developed in accordance with the procedure set forth in this Regional Board's Resolution No. 73-16 in order to obtain data and document compliance with waste discharge requirements established in Regional Board Order No. 85-98.
2. Is effective on the date shown below.
3. May be reviewed at any time subsequent to the effective date upon written notice from the Executive Officer or request from the discharger, and revisions will be ordered by the Executive Officer.

  
ROGER B. JAMES  
Executive Officer

Effective Date: September 18, 1985